· Cffice Memorandium · United STATES GOVERNMENT

. Assistant for Operations, SI

DATE: 3 Cct 52

ATTI : FROM :

SUBJECT: "Flastic"

1. From a perusal of the documents dealing with "Plastic," and discussions on Sarkenber 9, 1952 with Keerrs. The state of this oriefly is the procent status:

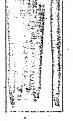
Thus far, no potent substance or substances have been identified in any of the snalyses to which the containers and their contents have been subjected. He psychochemical agent has been found which, upon injection into any part of the body, right, as subjected, "senior the victin accorable to guidance of his capter for an inisfinite, time and night even enable him to walk erect and show no evidence of introduction. The rain reason for this failure is the extreme secrety of material now left for analysis. Other reasons for the vary slow progress grant

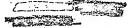
- a. the lack of knowledge of natural or synthetic substances or mintures with the exact psychological and physiclogical affects upon human behavior indicated.
- lack of data of physical characteristics of psychochemical substances for comparison and guidance.
- c. scarcity of microchemical tests for these agents.
- general unfamiliarity, with microphysiclogical screening tests.
- Results of previous exeminations are as follows:
 - a. Plastic Container

According to the plastic was identified as polymetryl nethylactrylate, probably namefactured in Germany, (Rains and Mars, Darmstadt, W. Germany). It is believed the containers could have been produced from this plastic resin in B. Cormany, is well as in the USER.

b. Collarsible Aluminum Tube

First examination in Army Field Laboratory, Germany Original volume: 1.5cc. - After contribuging: 1.1cc. Reaction: slightly acid





Tests for I test Drucs

Harcotics

Hypnotics

Alkaloidal Stirulants

Anosthetics

Anglessic:

Morphine - neg. Apparorphine " Codeina

Cocaine

Barbiturates-neg. Atronine - neg. Strychnine - "

Theobrouine -" Quinine

Chloroform-neg. Salicylates-ne: Chloral hydrate

3. Second exemination in Laboratory and Consultants Laboratory:

Material: 2 droplets of white gelatinous liquid

Microscopically identified: a. 1-celled vegetable substance

(Contamination b. Many calcium sulfate crystals

Spectrographically: U. V. analysis eliminated sodium barbital-

Feak simulder: 290 milli-microns : 250 Characteristic for (scopolanine -absent)

Third exemination in the second consultant's Laboratory:

Material: 25 micrograms of residue obtained from scrapings and washings of:

a. Plastic Container

b. Collarsible Aluminum Tube

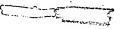
c. Hypodermic naedle fragment

Physical Characteristics:

From the residue, Command of the Research and Development Division obtained a few crystals by addition of hydrochloric acid. He has determined certain physical characteristics and offered to continue the physical characterisation, including density, refractive index and x-ray diffraction pattern, (see attached folder for illustration) and nolecular weight determination. Dr. of colical School has determined other physical properties of the crystals, including the infrared and ultraviolet absorption spectra. Results indicated that probably scorolamine is absent.

Cherical Characteristics:

The belief has been expressed by Dr. (as related by Mr.) I'r. (that the crystals are likely of an organic nature and that possibly nitrogen is present. The substance or substances thus may have the character of an elkaloid. No microcharical tests have been made and apparently only few ere available.



Microphysiclorical Correctoristics

- No tests have been made to determine the physiological or toxicological proporties. Drawing the Chief of the Analytical Division, has discussed the problem in a well-inner way with Drawing head of the Francecology department of the physiology and the station was deferred.
- 5. Fourth examination in Laboratory-Consultant's Laboratory:

Material: Hypodermic needle fragment. The outside surface of the needle gave a benzidine test for blood.

The following are the steps already undertaken or planned:

7 1. 1.

- 1. hr. promised to collect for transmittel o this egency will written reports and protographic evidence then under preparation by both Ressrs.
 - .2. Er. offered to collect the remainder of the residue them in the hands of Dr. offered for further tests tentatively decided upon.
- 3. Mr. state agreed to complete his tests and compare his findings with those to be obtained in a separate study of any substance submitted to him for that purpose.
- 4. Reservite and incremental the microphysical and incremental characteristics of alkaloids, heping to thus characterize the ratorial in question.
- 5. Er. 1 asked for essistance and offered his oun in collecting psychochemical substances which alone, or in certainction may be useful guides or key substances for further testing and comparison.
- A list of potent psychochemical agents is therefore in preparation includes substances from both natural, (especially Nursian croit sources) and synthetics.
- 7. Data for the microchemical testing, as well as the microphysiological or microtoxicological testing, (such as using the Daphnia as a microphysmacological test rethic) are being collected.



8. The literature and other sources are being screened for disclesure or description of substances and mixtures with proporties and rechangers of action which affect huran mind behavior and senses, including endurance, expeciousness, power of thought and perception, nearby, speech, locenotica, and individual will power.

Encl:

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